A case-control study of colorectal cancer and its relation to diet, cigarettes, and alcohol consumption in Saitama Prefecture, Japan.

Hoshiyama Y, Sekine T, Sasaba T.

Department of Epidemiology, Saitama Cancer Center Research Institute.

A case-control study of colorectal cancer in relation to dietary, smoking, and drinking habits was undertaken in Saitama Prefecture, Japan. The study was based on 181 newly diagnosed cases of adenocarcinoma of the colorectum at a single institution and 653 general population controls. Dietary habits were investigated on the basis of the intake of 12 foods and 12 food groups in a food intake frequency questionnaire, together with individual food preferences. Preference for salty foods was positively related to the risk of both colon and rectal cancer, and the consumption of seaweed was inversely related to these cancers, both with a dose-response relation. Cigarette smoking was inversely related to colon cancer risk, but not to rectal cancer risk. Alcohol intake tended to be associated inversely with colon cancer, but not with rectal cancer. In the multiple logistic regression, preference for salty foods (positively) and the consumption of seaweed (inversely) were independently related to both colon and rectal cancer risks.

A case-control study of single and multiple stomach cancers in Saitama
Prefecture, Japan.

Hoshiyama Y, Sasaba T.

Department of Epidemiology, Saitama Cancer Center Research Institute.

A case-control study of stomach cancer was done in Saitama Prefecture, Japan, in
relation to dietary, smoking, and drinking habits. The study was based on two
sets of cases (216 male single and 35 male multiple stomach cancer cases newly
diagnosed and of adenocarcinoma type), and 483 male controls derived from
residents of Saitama Prefecture. Dietary habits were investigated for the intake
of 12 separate foods and 12 food groups by means of a food frequency
questionnaire, including individual taste preferences. Among the single stomach
cancer series, dose-response relationships were observed for 7 dietary items
(preference for salty foods, miso soup, boiled fish, pickled vegetables, nuts,
raw vegetables, and seaweed) in the multiple logistic regression analysis. As
for the multiple stomach cancer case series, dose-response relationships were
observed for 3 dietary items (miso soup, fruits, and seaweed) in the multiple
logistic regression analysis. Cigarette smoking and alcohol use were not
significantly related to the risk of either single or multiple stomach cancer.

Association of soy and fiber consumption with the risk of endometrial cancer.

Goodman MT, Wilkens LR, Hankin JH, Lyu LC, Wu AH, Kolonel LN.

Epidemiology Program, Cancer Research Center of Hawaii, University of Hawaii, Honolulu, USA.

The authors conducted a case-control study among the multi-ethnic population of Hawaii to examine the role of dietary soy, fiber, and related foods and nutrients on the risk of endometrial cancer. Endometrial cancer cases (n = 332) diagnosed between 1985 and 1993 were identified from the five main ethnic groups in the state (Japanese, Caucasian, Native Hawaiian, Filipino, and Chinese) through the rapid-reporting system of the Hawaii Tumor Registry. Population controls (n = 511) were selected randomly from lists of female Oahu residents and matched to cases on age (+/-2.5 years) and ethnicity. All subjects were interviewed using a diet history questionnaire that included over 250 food items. Non-dietary risk factors for endometrial cancer included nulliparity, never using oral contraceptives, fertility drug use, use of unopposed estrogens, a history of diabetes mellitus or hypertension, and a high Quetelet's index (kg/cm2). Energy intake from fat, but not from other sources, was positively associated with the risk of endometrial cancer. The authors also found a positive, monotonic relation of fat intake with the odds ratios for endometrial cancer after adjustment for energy intake. The consumption of fiber, but not starch, was inversely related to risk after adjustment for energy intake and other confounders. Similar inverse gradients in the odds ratios were obtained for crude fiber, non-starch polysaccharide, and dietary fiber. Sources of fiber, including cereal and vegetable and fruit fiber, were associated with a 29-46% reduction in risk for women in the highest quartiles of consumption. Vitamin A and possibly vitamin C, but not vitamin E, were also inversely associated with endometrial cancer, although trends were not strong. High consumption of soy products and other legumes was associated with a decreased risk of endometrial cancer (p for trend = 0.01; odds ratio = 0.46, 95% confidence interval 0.26-0.83) for the highest compared with the lowest quartile of soy intake. Similar reductions in risk were found for increased consumption of other sources of phytoestrogens such as whole grains, vegetables, fruits, and seaweeds.

Ethnic-specific analyses were generally consistent with these results. The observed dietary associations appeared to be largely independent of other risk factors, although the effects of soy and legumes on risk were limited to women who were never pregnant or who had never used unopposed estrogens. These data suggest that plant-based diets low in calories from fat, high in fiber, and rich in legumes (especially soybeans), whole grain foods, vegetables, and fruits reduce the risk of endometrial cancer. These dietary associations may explain in part the reduced rates of uterine cancer in Asian countries compared with those in the United States.

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A prospective study of demographics, diet, and prostate cancer among men of Japanese ancestry in Hawaii.

Severson RK, Nomura AM, Grove JS, Stemmermann GN.

Japan-Hawaii Cancer Study, Kuakini Medical Center, Honolulu, Hawaii 96817.

Prostate cancer incidence was prospectively studied among 7999 men of Japanese ancestry who were first examined between 1965 and 1968 and then followed through 1986. During this surveillance period, 174 incident cases of prostate cancer were recorded. Prostate cancer was not associated with any measure of socioeconomic status, including amount of education, type of occupation, and type of residence. There was also no relationship with the number of children, as a surrogate measure of sexual activity. Increased consumption of rice and tofu were both associated with a decreased risk of prostate cancer, while consumption of seaweeds was associated with an increased risk of prostate cancer. There was no relationship between prostate cancer and the intake of various nutrients, including total fat and total protein. Etiological implications of these associations are discussed, but more research is needed on these dietary factors and the subsequent development of prostate cancer before any firm conclusions can be drawn.